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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/259,852	03/01/1999	MITCHELL A. MARKOW	P98-2401	5769

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EXAMINER
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MEI, XU

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/259,852

**Applicant(s)**

MARKOW ET AL.

**Examiner**

Xu Mei

**Art Unit**

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2644

### DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 3/25/2004.

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6, 12, 19 and 44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification fails to disclose any means, method or functional steps to **enable one of ordinary skill in the art on how to** obtain a quality factor for the speaker as claimed. The specification fails to disclose this point.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2644

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2, 4-5, 8-11, 13, 16-17 and 22-23 rejected under 35 U.S.C. 102(b) as being anticipated by Derocher et al. (US-6,078,497 hereinafter, Derocher).

Regarding claims 1-2, 4-5, 8-11 and 13, Derocher discloses a computer system, comprising: a chassis that encloses at least one microprocessor, the chassis having a rear wall which faces away from a user during normal use; and an elector-acoustic transducer (i.e., speaker) mounted in the chassis, wherein the speaker is mounted to the rear wall designed for free-space operation (Fig. 1 shows a computer which includes a plurality of computer speakers 90 mounted on the rear side of the computer). The chassis of the computer would inherently having an acoustic impedance magnitude of less than half that of an acoustic suspension box of the same dimension. The computer would have also inherently including a sound card and one of the speakers 90 can be viewed as an external speaker. As for claim 10,

Art Unit: 2644

the computer base can be read as a main system module. The acoustic speaker output signals would inherently including wall-effect for providing acoustic spatial impression when the computer system is being used inside a room has walls.

6. Claims 16-17 and 22-23 are similar to claims 1-2 and 4-5 except for being couched in method terminology; such methods would be inherent when the structure is shown in the references.

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 14, 18, 24, 30-33, 35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher in view of Sugimura (US-5,926,627).

Regarding claims 3, 14, 18, 24 and 37-38, what's not taught by Derocher as discussed above in independent claims 1, 10 and 16 is the speaker is mounted to the center of the

Art Unit: 2644

rear wall of the computer chassis that faces away from a user during normal use. Sugimura in Fig. 22 discloses a computer chassis with speakers being mounted to a rear wall that faces away from a user during normal use. It would have been to one of ordinary skill in the art to combine the teaching of Derocher and Sugimura by mounting speakers at the rear wall of the computer chassis that faces away from a user during normal use in order to create a better stereophonic or surround sound. Although Sugimura did not specifically show the speaker being arranged at center of the rear wall, one of ordinary skill in the art would have been realized mounting speaker at various place(s) according to one's desired preference would have been obvious. And the output sound generation would have been inherently created in a range in front of the user's face when using the computer system.

Regarding claims 30-33 and 35, both computer systems of Derocher and Sugimura would have including a sound source such as a CD player, a wave table, or a speaker phone. And a sound card is generally included in a computer system for audio signals processing.

Art Unit: 2644

9. Claims 20-21, 25-29, 34 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher in view of Sugimura as discussed in claim 24 above, and further in view of Koyama et al (US-5,581,621).

Regarding claims 20-21, 25-29, 34 and 36, the improved computer system by the combinations of Derocher and Sugimura does not specifically including an equalizer and gain staging for the computer system. Koyama discloses a programmable equalizer for automatically adjusting the frequency response and amplifier gain (i.e., gain staging) of an audio system by divides an audio signal into number of frequency bands and selectively amplifies and attenuates each frequency band to achieve a desired sound quality (see Fig. 2, element 21 and col. 1, lines 31-44). It would have been obvious to one of ordinary skill in the art to further combines the teachings of Derocher and Sugimura and Koyama to includes an programmable equalizer for automatically adjusting the frequency response and amplifier gain by divides an audio signal into number of frequency bands and selectively amplifies and attenuates each frequency band to achieve a desired sound quality for the computer system.

Art Unit: 2644

10. Claims 7, 15 and 39-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derocher in view of Sugimura as discussed in claims 1-4 above, further in view of well known prior art.

Regarding claims 7, 15 and 39-43, the improved computer system by the combinations of Derocher and Sugimura does not specifically including an long throw speaker or driver has a throw length greater than 10 percent of its minimum cone diameter. However, long throw speaker or driver is old and well known in the audio art for providing high output for high frequency audio signals with specific defined throw length of the speaker or driver. It would have been obvious to one of ordinary skill in the art to utilizes an old and well known long throw speaker or driver for the computer system of Shin or Sugimura in order to providing high output for high frequency audio output signals.

11. Applicant's amendment necessitated the new grounds of rejection. Accordingly, THIS ACTION IS MADE FINAL. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).




Art Unit: 2644

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 703-308-6610. The examiner can normally be reached on Monday-Friday (9:30-6:00), alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W Isen can be reached on 703-305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Xu Mei  
Primary Examiner  
Art Unit 2644  
6/8/2004